Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-17.   (Canceled)

18.   (Currently Amended) A method for transcoding a ~~compressed voice~~ source codec bitstream ~~from~~ in a source codec ~~format~~ to ~~variable-rate~~ a destination variable-rate codec bitstream in a destination variable-rate codec ~~format~~, the method comprising:

~~processing a~~ unpacking the source codec ~~input~~ bitstream to ~~unpack~~ at least one or more source voice parameters ~~from an input bitstream in the case of CELP-based codecs the voice parameters include at least LSPs, pitch lag, adaptive codebook gain, fixed codebook gain, and fixed codevectors~~;

interpolating the one or more source voice parameters to one or more interpolated voice parameters if a difference exists between at least one of a source frame size and a destination frame size or a source subframe size and a destination subframe size or a source sampling rate and a destination sampling rate;

classifying a frame ~~type of a destination codec from~~ class based upon the one or more ~~input~~ source voice parameters ~~of the source codec~~ or the one or more interpolated voice parameters, wherein the frame class is selected from three or more frame classes;

determining ~~the~~ a rate ~~of the destination codec output from one or more input parameters of the source codec and~~ from at least one of the one or more source voice parameters, the one or more interpolated voice parameters, the frame class, and one or more external control commands, wherein the rate is selected from three or more rates associated with the destination variable-rate codec format;

~~interpolating one or more of a plurality of unpacked voice parameters from a source codec format to a destination codec format if a difference exists between the frame size, subframe size, or sampling rate of the destination codec and the frame size, subframe size, or sampling rate of the source codec;~~

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mapping the ~~one or more~~ source ~~CELP~~ voice parameters ~~to destination CELP~~ or the one or more interpolated voice parameters ~~using a selected mapping strategy~~ to one or more mapped voice parameters;

~~encoding the one or more CELP parameters for the destination codec;~~ and

~~processing a destination bitstream by~~ packing the one or more mapped voice parameters ~~for the~~ into the destination variable-rate codec bitstream.

19.   (Canceled)

20.   (Currently Amended) The method of claim 18, wherein classifying the frame ~~type of the destination codec~~ class comprises ~~the steps of~~:

selecting ~~classifier input~~ one or more voice parameters from the one or more source ~~codec CELP~~ voice parameters ~~and the source bit rate through a selection module~~ or the one or more interpolated voice parameters;

~~using one or more external commands;~~

using a previously stored state information;

performing frame classification ~~according to pre-defined coefficients or rules~~ to produce the frame class;

outputting the frame class; and

updating ~~and storing the states~~ the previously stored state information for use in classifying one or more future frames.

21.   (Currently Amended) The method of claim 18, wherein determining the rate ~~of a destination codec~~ comprises ~~the steps of~~:

selecting ~~classifier input~~ one or more voice parameters from the one or more source ~~codec CELP~~ voice parameters [[and]] or the one or more interpolated voice parameters and a source frame rate associated with the source ~~bit rate through a selection module~~ codec bitstream;

using the frame class;

using the one or more external control commands;

using a previously stored state information;

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performing rate determination ~~according to pre-defined coefficients or rules~~ to produce the rate;

outputting the rate; and

updating the previously stored ~~states~~ state information for use in determining ~~the rate of~~ one or more rates for one or more future frames.

22.   (Currently Amended) The method of claim 20 wherein ~~the pre-defined coefficients for~~ frame classification ~~are predetermined during a setup training process or construction process~~ uses one or more pre-defined coefficients.

23.   (Currently Amended) The method of claim 21 wherein ~~the pre-defined coefficients for~~ rate determination ~~are predetermined during a setup training process or construction process~~ uses one or more pre-defined coefficients.

24-25. (Canceled)

26.   (Currently Amended) The method of claim 18, wherein mapping ~~the parameters further~~ comprises ~~the steps of~~:

selecting one of a plurality of voice codec mapping strategies;

mapping [[the]] one or more source LSP coefficients or one or more interpolated LSP coefficients to one or more destination LSP coefficients;

[[and]] quantizing the one or more destination LSP coefficients; and

mapping [[the]] one or more source excitation parameters or one or more interpolated excitation parameters to one or more destination excitation parameters;

quantizing the one or more destination excitation parameters~~; and~~

~~selecting one of a plurality of CELP mapping strategies according to the control signal from the decision module~~.

27.   (Currently Amended) The method of claim 26, wherein mapping ~~the source interpolated excitation parameters~~ further comprises ~~the steps of~~:

reconstructing ~~the source~~ an excitation signal ~~if required by the mapping strategy~~ from the one or more source excitation parameters or the one or more interpolated excitation parameters;

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filtering the ~~reconstructed source~~ excitation signal with a ~~filter that accounts for the differences between the quantized destination LP coefficients and quantised source LP coefficients to form the~~ calibration factor to produce a calibrated excitation ~~vector~~ signal; and

transferring processing the calibrated excitation signal to produce the one or more destination excitation parameters ~~vector to another process; and~~

~~transferring the source excitation vector to the encoding process if the excitation vector does not require a calibration~~.

28.   (Currently Amended) The method of claim 26 wherein the plurality of ~~CELP~~ voice code mapping strategies ~~includes~~ include at least one of:

a direct space mapping of the ~~CELP~~ voice parameters;

a mapping using analysis in [[the]] excitation space;

a mapping using analysis in [[the]] filtered excitation space; and

~~analysis in the combined excitation space and filtered excitation space~~ a mapping using a combination of two or more voice codec mapping strategies.

29.   (Currently Amended) [[A]] The method of claim 27 ~~where~~ wherein reconstructing the ~~reconstructed~~ excitation signal ~~may or may~~ does not ~~be modified~~ include a process of modifying the excitation signal to match an interpolated delay contour.

30-34. (Canceled)

35.   (Currently Amended) The method of claim 28 wherein the mapping using analysis in excitation ~~mapping~~ space is performed without ~~going back to the~~ using a signal in a speech signal domain.

36.-55. (Canceled)

56.   (New) The method of claim 18 wherein the destination variable-rate codec is EVRC.

57.   (New) The method of claim 18 wherein the destination variable-rate codec is SMV.

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58.   (New) The method of claim 18 wherein the destination variable-rate codec is a Relaxed CELP voice codec.

59.   (New) The method of claim 18 wherein the source codec and the destination variable-rate codec are within a single standard but are different modes.

60.   (New) The method of claim 18 wherein the three or more frame classes are silence, unvoiced, onset, plosive, non-stationary voiced, and stationary voiced speech.

61.   (New) The method of claim 18 wherein the three or more rates comprise a full rate, a half rate and an eighth rate.

62.   (New) The method of claim 18 wherein mapping comprises selecting a mapping path from three or more mapping paths.

63.   (New) The method of claim 62 wherein selecting a mapping path uses at least a source frame rate, the rate and the one or more external commands.

64.   (New) The method of claim 63 wherein the one or more external commands comprise one of a mode selected from six SMV modes or an EVRC external rate command.

65.   (New) The method of claim 62 wherein selecting a mapping path uses at least one or more of a source frame rate and a source SMV frame type.

66.   (New) The method of claim 18 wherein the destination variable-rate codec is characterized by 3 subframes per frame.

67.   (New) The method of claim 18 wherein the destination variable-rate codec is characterized by 1, 2, 3, 4 or 10 subframes per frame.

68.   (New) The method of claim 18 wherein classifying a frame is performed without reconstructing a speech signal.

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69.   (New) The method of claim 20 wherein the previously stored state information comprises one or more source frame rates, one or more destination frame classes and one or more destination frame rates.

70.   (New) The method of claim 21 wherein the previously stored state information comprises one or more source frame rates, one or more destination frame classes and one or more destination frame rates.

71.   (New) The method of claim 28 wherein the mapping using a combination of two or more voice codec mapping strategies is a mapping using a combination of analysis in excitation space and analysis in filtered excitation space.

72.   (New) The method of claim 18 wherein the rate is determined from the frame class and zero or more of the one or more source voice parameters, the one or more interpolated voice parameters, and the one or more external control commands.